database, e.g., an outside move, a change in the signaling characteristics of a circuit (e.g., from data to voice), a rearrangement of MCIm's routing priority between nodes, virtual port establishment, etc.

10.10.4.3 DCS Port Charge

10.10.4.3.1 MCIm shall pay a DCS rate per month per port requested. SWBT shall make three types of port configurations available as follows:

- **DS0 (56Kbps) channel port termination;**
- **DS1 (1.544Mbps) channel port termination; and**
- **DS3 (44.736Mbps) channel port termination.**

10.10.4.4 Reconfiguration Charges

10.10.4.4.1 MCIm must specify: Full 45Mbps or 1.544Mbps bandwidth, sub 45Mbps or 1.544Mbps bandwidth, contiguous subtending channel groupings (up to and including all 24 subtending channels within a 1.544Mbps service), contiguous 1.544Mbps service groupings (up to and including all 28 1.544Mbps services within a 45Mbps service), or individual subtending channel or 1.544Mbps service arrangements for SWBT to provide the appropriate UDT elements. This specification limits the parameters within which the element can be reconfigured and defines how reconfiguration charges will apply. If reconfiguration is at the subtending channel, 1.544Mbps or 45Mbps level, one reconfiguration charge applies per subtending channel, 1.544Mbps service or 45Mbps circuit reconfigured; if reconfiguration is for a previously defined contiguous group of subtending channels, one reconfiguration charge applies per group of DS0s reconfigured; etc. One reconfiguration charge applies per cross-connect and/or disconnect successfully completed in a DCS per request.

10.10.4.4.2 To reconfigure a circuit that is routed through two DCS offices (the existing circuit being routed between MCIm premises A through the two DCS offices to MCIm

premises B, and MCIm wishes to reconfigure the circuit to be rerouted between MCIm premises A through the two DCS offices to MCIm premises C), MCIm shall make two transactions: one transaction to disconnect the circuit between premises A and B, and one transaction to reconnect the circuit between premises A and C. In such case, MCIm would be billed four DCS charges: two for disconnecting the circuit (one for each disconnect at each DCS office), and two for reconnecting the circuit (one for each reconnect at each DCS office).

10.10.4.5 MCIm shall pay nonrecurring charges for UDT facility elements, when existing channels must be terminated in a DCS. When an existing DS3 circuit is terminated in a DCS, MCIm shall pay UDT element nonrecurring charges.

10.10.5 UDT Monthly Rates

10.10.5.1 MCIm shall pay recurring monthly rates each month or fraction thereof that a UDT element is provided at rates set forth in Attachment I.

10.10.6 UDT Nonrecurring Charges

10.10.6.1 MCIm shall pay nonrecurring (one-time) charges for specific work activity (i.e., installation or change to an existing UDT element). The types of nonrecurring charges that apply for UDT elements are:

- **Installation of UDT elements**
- **Rearrangements of UDT elements.**

10.10.7 Rearrangements of UDT Elements

10.10.7.1 Rearrangements are changes to existing (installed) UDT which do not result in either: (1) a change in the minimum period requirements as set forth in section UDT.10.12 (Minimum Period); or, (2) a change in the physical location of the termination point of the UDT element.

10.10.7.2 Changes which result in the establishment of new minimum period obligations of a UDT element are treated as

disconnects and starts.

10.10.7.3 MCIm shall pay Wholesale Construction charges for changes to the termination point of a UDT element.

10.10.7.4 The charge to MCIm for the UDT element rearrangement depends on whether the change is administrative only in nature or involves actual physical change to the UDT element.

10.10.8 UDT Mileage Measurement

10.10.8.1 The mileage to be used to determine the monthly rate for the I/O Transport UDT element is calculated on the airline distance between the locations involved, i.e., facility terminating points.

10.10.8.2 To determine the rate to be billed, SWBT shall first compute the mileage using the V&H coordinates method, as set forth in the National Exchange Carrier Association, Inc. Tariff F.C.C. No. 4, and the wire center Zone information. When the calculation results in a fraction of a mile, SWBT shall round up to the next whole mile before determining the mileage and applying the rates. The additional mileage quantity is less 1 mile from the computed mileage since the First Mile rate component includes the first mile of interoffice mileage.

10.10.9 UDT Minimum Periods

10.10.9.1 The minimum service period for UDT elements, including all Multiplexing, is 12 months.

10.10.10 Termination Charges

10.10.10.1 In the event MCIm discontinues the use of UDT elements prior to the expiration of the minimum service period, MCIm shall pay the rates and charges for the terminated UDT elements as follows.

10.10.10.2 Terminated UDT elements with a twelve (12) month minimum period will be billed the remaining minimum period, in

full months, at one hundred percent (100%) of the rates applicable for each UDT element terminated.

11. Signaling Link Transport and SS7 Service

This Section sets forth the terms and conditions under which SWBT shall provide to MCIm certain Common Channel Signaling/Signaling System 7 (CCS/SS7) services, herein referred to as "SS7 Service."

11.1 This Section provides for the use of the SWBT Common Channel Signaling network, which uses the Signaling System 7 (SS7) protocol, and for a Dedicated Signaling Link, which provides network interconnection to SWBT's Signal Transfer Point (STPs), including facilities. The use of the STP provides CCS/SS7 functionality and translations to support SS7 based services and applications as they become available and as facilities permit.

The use of the STP includes the screening of messages based on origination signaling point code and the routing of messages by a SWBT mated pair of STPs. Any services beyond use of the STP or a Dedicated Signaling Link interconnection (e.g. Local and IntraLATA Call Set-Up Signaling, Interexchange Carrier (IXC) Call Set-Up Signaling, Easy Options℠, 800 Data Base Access, and Line Information Data Base (LIDB) Validation Service Access) will be provided by an amendment to this section, by a separate agreement, or by tariff, whichever is applicable, on terms and conditions no less favorable than those which SWBT provides to itself or its affiliates. MCIm shall make arrangements for SS7 services through the MCIm Service Center of SWBT.

11.2 Service Description

11.2.1 Use of the STP

11.2.1.1 The use of the STP provides for the routing and screening of SS7 messages by a SWBT pair of mated STPs. The screening of messages provides for MCIm designation of signaling points associated with MCIm and controls which messages may be allowed or not allowed by the SWBT STP pair. The routing of messages provides for the transfer of a complete message between signaling links connected to the STP, and for a Global Title Translation of the message address, if needed.

11.2.1.2 The use of the STP provides routing of messages for all

parts of the SS7 protocol including, for example, Message Transfer Part (MTP) messages, Integrated Services Digital Network User Part (ISDNUP or ISUP) messages, Signaling Connection and Control Part (SCCP) messages, Transaction Capability Application Part (TCAP) messages and Operations and Maintenance Application Part (OMAP) messages.

11.2.1.3 The use of the SWBT STP provides for screening and routing of signaling messages based on the SS7 protocol. These messages may support other applications and services such as, Easy Option sm (referred to as Call Control Option smor Bellcore CLASS®) services, Message Waiting services, Toll Free Database services, Line Information Data Base (LIDB) Services, Calling Name (CNAM) Database services, Advanced Intelligent Network (AIN) services, and Telecommunications Industry Association Interim Standard-41 (IS-41) services. Use of the STP will route messages to the global title address or to the signaling point code address of the message based on the translation information of SWBT's STP.

11.2.1.4 Use of the STP provides screening and routing of messages that are generated by the action of MCIm signaling point, or messages that are generated by a signaling point connected via MCIm signaling point.

11.2.1.5 MCIm may use the STP under three options, as follows:

11.2.1.5.1 Signaling for MCIm with its own Signaling Point, utilizing its own set of links: Use of the STP routes signaling traffic generated by action of MCIm to the destination defined by SWBT's signaling network. MTP, ISUP, SCCP, TCAP and OMAP signaling traffic addressed to signaling points associated with MCIm set of links will be routed to MCIm.

11.2.1.5.2 Signaling for MCIm with its own Signaling Point, utilizing a set of links of another party: MCIm may order service associated with the set of links of another party by including a Letter of Authorization (LOA) from the owner of the set of links at the time service is ordered. The LOA will indicate that the owner of the set of links will accept SWBT charges for SS7 service ordered by

MCIm.

11.2.1.5.3 Signaling for MCIm utilizing SWBT's Local Switching Unbundled Network Element (UNE): Use of SWBT's SS7 signaling network will be provided as set forth in an order for the Local Switching unbundled network. MCIm does not separately order SS7 Service under this method.

11.2.2 Dedicated Signaling Links

11.2.2.1 Dedicated Signaling Links provide physical access to SWBT's signaling network. The links are fully dedicated to the use of MCIm. Dedicated signaling links are provided as a set of links connecting to a SWBT mated pair of STPs. Dedicated Signaling Links are dedicated two-way signaling links that interconnect SWBT's STP locations and MCIm's Signaling Points at Signaling Point of Interface (SPOI) locations. Dedicated Signaling Links are available to MCIm for its use in furnishing SS7-based services or applications to its end users or other users of SS7 signaling information.

11.2.2.2 The Dedicated Signaling Links include the following parts:

11.2.2.2.1 STP Access Connection: The STP Access Connection is a DS1 facility that transmits signaling data between MCIm premise and a SWBT DS1 multiplexing hub. The STP Access Connection may be optional if MCIm provides an alternative DS1 or DS0-A channel of a DS1.

11.2.2.2.2 STP Access Link: The STP Access Link is a 56 kbps circuit that transmits signaling data and connects the MCIm SPOI to the port of the SWBT STP.

11.2.2.2.3 STP Port Termination: The STP Port Termination is the physical termination of the STP Access Link (i.e. 56 kbps circuit) at a SWBT STP. **An STP Port Termination is used for each 56 kbps Access Link facility terminated at a SWBT STP.**

11.2.2.3 When MCIm uses an alternative DS1 facility which does not comport to the physical degree of diversity specified in Bellcore, GR-905-CORE, MCIm acknowledges that the performance and reliability of the SS7 protocol may be affected and the performance and reliability standards described in GR-905-CORE may be disqualified.

11.2.2.4 Dedicated Signaling Links are subject to SWBT compatibility testing and certification requirements per the Network Operations Forum Reference Document, per Bellcore, GR-905-CORE and per SWBT Technical Publication, TP76638. First interconnections to the SWBT signaling network per MCIm and per signaling point type of equipment will require pre-ordering meetings to exchange information and schedule testing for certification by SWBT.

11.2.3 Manner of Provisioning

11.2.3.1 Use of the STP

11.2.3.1.1 MCIm shall designate the signaling points and signaling point codes associated with MCIm. MCIm shall provide information to SWBT to allow SWBT to translate SWBT STPs. The information shall define the route messages will use for the signaling point codes of MCIm. This information may include global title address, translation type and subsystem designations as needed.

11.2.3.1.2 MCIm shall use the SWBT SS7 Service subject to the screening and routing information of the SWBT STPs. SWBT shall provide information to MCIm on the routes and signaling point codes of the SWBT STPs.

11.2.3.1.3 The STP routes ISUP messages for the purpose of establishing trunk voice paths between switching machines. Call set-up times may be adversely affected when MCIm, using SS7 signaling, employs Intermediate Access Tandems (IATs) in its network. SWBT makes no warranties with respect to call set-up times when multiple STP pairs are involved or when the signaling traffic is exchanged between two non-SWBT signaling points.

11.2.3.1.4 Routes requiring ISUP routes longer than two STP pairs may be provisioned pursuant to a Local Service Request per specific MCIm request, if such route is technically feasible. However, routes involving signaling point codes not associated with MCIm are subject to the route designated by the owner of the SPC.

11.2.3.1.5 When MCIm requires modification of SWBT's SS7 Service components not otherwise provided in this contract, the modifications may be furnished pursuant to the BFR process described in Attachment XI.

11.2.3.1.6 The STP will route some messages, such as 800 database queries, at no additional incremental charge. Charges for the use of the STP for these messages are covered under other rates that MCIm has agreed to pay pursuant to contract, per tariff or per some other arrangement.

11.2.3.1.7 SWBT initiated rearrangement of the SWBT SS7 network shall not result in additional charges to MCIm without the prior consent and approval of MCIm.

11.2.3.1.8 Use of the STP provides a signaling route for messages only to signaling points to which SWBT has a route. Use of the STP by MCIm does not include the provision of a signaling route to every possible signaling point. When SWBT does establish a route to a signaling point in a mated pair of STPs, the route may not be available to other SWBT pairs of STPs. When SWBT or MCIm, pursuant to a service order, arranges to establish a route to a signaling point, such route to the other signaling point or other signaling network shall be used by all signaling points within and connected to the SWBT signaling network per the standard requirements of the SS7 protocol.

11.2.3.1.9 Disputes concerning the association of a signaling point among specific link sets associated with a SWBT mated STP shall be resolved by consultation with the signaling point owner, as defined in the Local Exchange Routing Guide (LERG), Section 1, Assignment of

Signaling Point Codes.

11.2.4 Dedicated Signaling Links

11.2.4.1 Link facilities to SWBT mated pairs of STPs are provided to MCIm designated premises within the same LATA. A set of links can be either:

11.2.4.1.1 "A" Link Sets from MCIm's Signaling Point (SP)/Service Switching Point (SSP). A minimum of two links will be required, one from the SP/SSP to each STP; or

11.2.4.1.2 "B" Link Sets from MCIm's STPs that are connected to SWBT's mated pair of STPs. A minimum of four links will be required (i.e., a "quad") between the two pairs of STPs.

11.2.4.2 **An STP Port Termination is required for each 56 kbps access link utilized for the Service.** STP locations are set forth in the National Exchange Carrier Association, Inc. (NECA) Tariff FCC No. 4.

11.2.5 A pre-order meeting will define the SWBT facility availability and the degree of diversity in both the SWBT physical network and MCIm physical network from signaling point to signaling point for the link.

11.2.6 All applicable signaling point codes for each signaling link must be installed at each of SWBT's interconnecting STPs.

11.2.6.1 Provisioning of the SS7 Service is in accordance with SWBT CCS/SS7 Network Interface Specifications (TP76638) and Bellcore Common Channel Network Interface Specification (GR-905-CORE), as amended.

11.2.7 Description of Rates and Charges

The following rates and charges apply to SS7 Service:

11.2.7.1 Dedicated Signaling Links

11.2.7.1.1 STP Access Connection

MCIm shall pay the STP Access Connection rate element when SWBT provides 1.544 Mbps transmission facilities between MCIm's premises and SWBT's DS1 multiplexing hub. The STP Access Connection charges are calculated according to mileage band. There are two rates that apply per band, i.e., a fixed monthly rate per mileage band and a monthly rate per mile.

MCIm shall pay a nonrecurring charge per STP Access Connection. This charge applies on a first and additional basis.

11.2.7.1.2 STP Access Link

MCIm shall pay the STP Access Link rate element for the 56 kbps transmission facilities between MCIm premises or a designated SWBT DS1 multiplexing hub location and the SWBT STP.

STP Access Link is required per each dedicated signaling link and is calculated according to mileage band. There are two rates that apply per band, i.e., a fixed monthly rate per mileage band and a monthly rate per mile.

11.2.7.1.3 STP Port Termination

MCIm shall pay the STP Port Termination rate element for the termination of the 56 kbps circuit at the SWBT STP. One STP Port Termination must be installed at SWBT's interconnecting STP for each 56 kbps circuit.

There are two charges that apply to the STP Port Termination, i.e., a fixed recurring monthly rate per port termination and a nonrecurring installation charge per port.

11.2.7.1.4 Signaling Point Code Addition

MCIm shall pay the Signaling Point Code Addition rate element for the establishment and translation of

applicable CCS network signaling point codes at the SWBT STP. MCIm shall pay a nonrecurring charge per Signaling Point Code established at each STP. However, rearrangement of the SWBT SS7 network shall not result in additional charges to MCIm without the prior consent and approval of MCIm.

11.2.7.2 Global Title Translation (GTT) Addition

11.2.7.2.1 MCIm shall pay the GTT Addition rate element for the establishment and translation of MCIm's global title address, translation type or subsystem information in the SWBT STP. MCIm shall pay a nonrecurring charge per GTT established at each STP.

11.2.7.3 Service Rearrangement

11.2.7.3.1 MCIm shall pay charges for rearrangement of the SS7 Service that are not specifically addressed in this Section 11 pursuant to the BFR process.

11.2.7.4 Mileage used to determine the monthly rate per mile is calculated using the V&H coordinates method, as set forth in the National Exchange Carrier Association, Inc. Tariff F.C.C. No. 4.

11.2.8 Ordering the Service

MCIm shall abide by the following ordering guidelines:

11.2.8.1 Use of the STP

11.2.8.1.1 Signaling for MCIm with its own Signaling Point, utilizing its own set of links. **MCIm shall submit SWBT's CCS/SS7 Activity Notification Form, identify the set of links MCIm will use and identify the service(s) associated with each SPC.**

11.2.8.1.2 Signaling for MCIm with its own Signaling Point, utilizing set of links of another party. MCIm shall submit SWBT's CCS Activity Notification Form along

with the Letter of Authorization (LOA) from the owner of the set of links at the time service requiring the use of SWBT SS7 Service is ordered. MCIm shall also indicate the set of links and which SP will be utilized from the other party's set of links.

11.2.8.2 Dedicated Signaling Links

To establish the Dedicated Signaling Links, MCIm shall submit an Access Service Request form with SWBT's CCS Activity Notification form.

11.2.9 Responsibilities of SWBT

11.2.9.1 SWBT shall manage the network and, at its sole discretion, apply protective controls. Protective controls include actions taken to control or minimize the effect of network failures or occurrences, which include, but are not limited to, failure or overload of SWBT or MCIm facilities, natural disasters, mass calling or national security demands.

11.2.9.2 SWBT shall determine the GTT and Translation Type (TT) route for messages routed to GTT which are associated with SWBT signaling points.

11.2.9.3 SWBT shall define regional functions and local functions of its STPs. SWBT will route ISUP messages within the SWBT signaling network subject to technical feasibility. Capacity limitations shall define a temporary technical infeasibility until the capacity limit can be resolved.

11.2.9.4 SWBT shall meet service performance standards as outlined in GR-905-CORE and TP76638 except as otherwise provided herein.

11.2.9.5 In the event that SWBT provides under this section special service arrangements associated with diversity or other arrangements that do not strictly adhere to GR-905-CORE and TP76638 and do not comply with the technical publications or are not certified by SWBT, MCIm acknowledges that the service performance standards need not be met in the provision of the total service.

11.2.9.6 **SWBT shall route messages generated by the action of MCIm throughout the SWBT signaling network.** The content of the messages is for the use of signaling points of origination and destination. SWBT shall not use any information within messages for any purpose not required by or related to the use of the SWBT signaling network. SWBT shall not divulge any message or any part of messages generated by MCIm to any other party, except as required to manage the SWBT signaling network or as may be required by law.

11.2.9.7 SWBT shall work cooperatively and provide knowledgeable personnel to meet with MCIm in order to provision, test, and install the SS7 Service in a timely fashion.

11.2.10 Responsibilities of MCIm

11.2.10.1 MCIm shall provision the signaling links at MCIm premises and from MCIm premises to the SWBT DS1 multiplexing hub location in a diverse, reliable and technically acceptable manner to comply with the standard SS7 protocol, Bellcore GR-905-CORE and the SWBT network.

11.2.10.2 If MCIm requires a greater degree of diversity than SWBT provides in the existing network, a special facility or a special routing of services, MCIm agrees to initiate a Wholesale Construction request and pay additional charges as SWBT may reasonably determine.

11.2.10.3 MCIm shall identify to SWBT the SPC(s) associated with MCIm set of links.

11.2.10.4 When MCIm orders the use of the SWBT STP, MCIm shall specify the set of signaling links to be used. If the links are provided to another party, MCIm shall warrant to SWBT that the other party is aware of the charges associated with the use of the STP and that the other party will pay monthly charges for the use of the SWBT STP.

11.2.10.5 MCIm shall identify to SWBT the Global Title and Translation Type information for messages that route to MCIm.

11.2.10.6 When routing messages addressed to a SWBT

Subsystem Number (SSN), MCIm shall use the SWBT defined SSN designation of the SWBT mated STP pair to which the message is routed.

11.2.10.7 MCIm shall transfer Calling Party Number Parameter information unchanged, including the privacy indicator information, when ISUP Initial Address Messages are interchanged with the SWBT signaling network.

11.2.10.8 MCIm shall verify the accuracy of information concerning the services ordered by MCIm.

11.2.10.9 MCIm shall designate the level of diversity associated with MCIm premises. SWBT shall provide the same degree of diversity as MCIm provides.

11.2.10.10 MCIm shall work cooperatively and provide knowledgeable personnel to meet with SWBT in order to provision, test and install the SS7 Service in a timely fashion.

11.2.10.11 MCIm shall furnish to SWBT, at the time the SS7 Service is ordered and annually thereafter, an updated three year forecast of usage of the SS7 Signaling network. The forecast shall include total annual volume and busy-hour, busy-month volume. SWBT shall utilize the forecast only to project further facility requirements and for no other purpose.

11.2.10.12 MCIm shall inform SWBT in writing thirty (30) days in advance of any change in MCIm's use of such SS7 Service which alters by ten percent for any thirty (30) day period the volume of signaling transactions by individual SS7 service that are planned by MCIm to be forwarded to SWBT's network. MCIm shall provide in said notice the reason, by individual SS7 service, for the volume change. This notification will take place once traffic volumes reach a certain level as mutually agreed upon by SWBT and MCIm.

11.2.11 Credits

SWBT shall allow credit for interruptions of the Dedicated Signaling Links which are greater than thirty (30) minutes. The credit shall be at the

rate of 1/1440 of the monthly charges for the facility or service for each period of thirty (30) minutes or fraction thereof that the interruption continues after the initial thirty (30) minute outage. The monthly charges shall be the total of all monthly rate element charges associated with the service.

12. Signaling Transfer Points

The following documents shall define the standards that will be compatible with SWBT STPs.

12.1 ANSI T1.118-1992 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Intermediate Signaling Network Identification (ISNI);

12.2 Bellcore GR-905-CORE, Common Channel Signaling Network Interface Specification (CCSNIS) Supporting Network Interconnection, Message Transfer Part (MTP), and Integrated Services Digital Network User Part (ISDNUP); and

12.3 Bellcore GR-1432-CORE, CCS Network Interface Specification (CCSNIS) Supporting Signaling Connection Control Part (SCCP) and Transaction Capabilities Application Part (TCAP).

13. Service Control Points/Databases

13.1 Definition:

13.1.1 Call related databases are the Network Elements that provide the functionality for storage of, access to, and manipulation of information required to offer a particular telecommunications service and/or capability. Databases include, but are not limited to, **Number Portability**, LIDB, Toll Free Number Database, **and AIN**.

13.1.2 A Service Control Point (SCP) is a specific type of Database Network Element functionality deployed in a Signaling System 7 (SS7) network that executes service application logic in response to SS7 queries sent to it by a switching system also connected to the SS7 network. SCPs also provide operational interfaces to allow for provisioning, administration and maintenance of subscriber data and service application data. (e.g., an 800 database stores subscriber record data that provides information necessary to route 800 calls).

13.2 Technical Requirements for SCPs/Databases

Requirements for SCPs/Databases within this section address storage of information, access to information (e.g. signaling protocols, response times), and administration of information (e.g., provisioning, administration, and maintenance). All SCPs/Databases shall be provided to MCIm in accordance with the following requirements, except where such a requirement is superseded by specific requirements set forth in Subsections 13.3 through 13.9:

13.2.1 SWBT shall provide physical interconnection to SCPs through the SS7 network and protocols, as specified in Section 11.2.4 of this Attachment, with TCAP as the application layer protocol.

13.2.2 SWBT shall provide physical interconnection to databases for updating and posting MCIm data.

13.2.3 The reliability of interconnection options shall be consistent with requirements for diversity and survivability as specified in Section 12 of this Attachment (which applies to both SS7 and non-SS7 interfaces).

13.2.4 Database functionality shall be unavailable a maximum of 30 minutes per year.

13.2.5 SWBT shall provide database provisioning equivalent to that which it provides itself (e.g., data required, edits, acknowledgments, data format and transmission medium and notification of order completion).

13.2.6 The operational interface provided by SWBT shall complete Database transactions (i.e., add, modify, delete) for MCIm subscriber records stored in SWBT databases equivalent to that which SWBT provides to itself.

13.2.7 SWBT shall provide database maintenance consistent with the maintenance requirements as specified in this Agreement (e.g., notification of SWBT Network Affecting Events, testing, dispatch schedule and measurement and exception reports).

13.2.8 **SWBT shall provide billing and recording information to track database usage consistent with connectivity billing and recording requirements as specified in Attachment VIII of Agreement (e.g., recorded message format and content, timeliness of feed, data**

format and transmission medium).

13.2.9 SWBT shall provide SCPs/databases in accordance with the physical security requirements as specified in Attachment IX of this Agreement.

13.3 Number Portability Database

13.3.1 Definition:

The Number Portability (NP) database supplies routing numbers for calls involving numbers that have been ported from one local service provider to another. NP database functionality shall also include Global Title Translations (GTT) for calls involving ported numbers even if SWBT provides GTT functionality in another Network Element. This Subsection 13.3 supplements the requirements of Subsections 13.2 and 13.7. Both Parties will make a good faith effort to implement the Number Portability Database in accordance with the schedule provided by the FCC or the Commission.

13.3.2 Requirements

SWBT's Number Portability Database shall be developed in accordance with the requirement defined by the FCC (if any) and shall comply with the following:

13.3.2.1 SWBT shall make SWBT NP database available for MCIm switches to query to obtain the appropriate routing number on calls to ported numbers or the industry specified indication that the number is not ported for non-ported numbers in NPA-NXXs that are opened to portability. The specified indication will also be provided when the NPA-NXX is not open to portability;

13.3.2.2 Query responses shall provide such additional information, for example, Service Provider identification, as may be specified in the NP implementation in the relevant regulatory jurisdiction;

13.3.2.3 SWBT shall provide GTT for CLASS or LIDB queries routed to the SWBT network by MCIm switches. SWBT database or other Network Element shall perform the

GTT function and route the query to the appropriate switch or LIDB accordingly;

13.3.2.4 The NP database shall provide such other functionality as has been specified in the regulatory jurisdiction in which portability has been implemented;

13.3.2.5 Unavailability of the NP database query and GTT applications shall not exceed 4 minutes per year; and

13.3.2.6 The SWBT NP database shall respond to a query within 125 msec. of receipt of the query.

13.3.3 Interface Requirements

13.3.3.1 SWBT shall interconnect the signaling interface between the MCIm or other local switch and the NP database using the TCAP protocol as specified in the technical reference in Section 13.7.1, together with the signaling network interface as specified in the technical reference in Section 13.7.2, and such further requirements (e.g., AIN or IN protocols) as may be specified by bodies responsible for implementation of number portability in the jurisdiction at hand; (e.g., Generic Requirements for SCP Application and GTT Function for Number Portability, Issue 0.3, Final Draft, March 22, 1996 [Editor - Ameritech Inc.]).

13.4 Line Information Database (LIDB)

This Subsection 13.4 defines and sets forth additional requirements for the Line Information Database. This Subsection 13.4 supplements the requirements of Subsection 13.2 and 13.9.

13.4.1 Definitions:

13.4.1.1 Line Information Database (LIDB) is a transaction-oriented database system that functions as a centralized repository for data storage and retrieval. LIDB is accessible through Common Channel Signaling (CCS) networks. It contains records associated with customer Line Numbers and Special Billing Numbers (records maintained by SWBT are in accordance with the requirements in technical reference GR-1158-CORE). LIDB

accepts queries from other Network Elements including MCIm's Network Elements and provides return result, return error and return reject responses as appropriate. LIDB queries include functions such as screening billed numbers that provides the ability to accept Collect or Third Number Billing calls and validation of fourteen (14) digit based non-proprietary calling cards. The interface for the LIDB functionality is SWBT's regional STPs. LIDB also interfaces with the SWBT Line Validation Administration System as defined below.

13.4.1.2 Alternate Billing Service (ABS) means a service that allows end users to bill calls to accounts that may not be associated with the originating line. There are three types of ABS calls: calling card, collect, and third number billed calls.

13.4.1.3 Billed Number Screening (BNS) means a validation of toll billing exception (TBE) data.

13.4.1.4 Calling Card Service (CCD) means a service that enables a calling customer to bill a telephone call to a calling card number with or without the help of an operator.

13.4.1.5 Common Channel Signaling (CCS) Network means an out-of-band, packet-switched, signaling network used to transport supervision signals, control signals, and data messages. Validation Queries and Response messages are transported across the CCS network.

13.4.1.6 Data Owner means the telecommunications company whose subscriber(s) data is resident in a party's LIDB or LIDB-like database.

13.4.1.7 Line Record means information in LIDB that is specific to a single telephone number or special billing number.

13.4.1.8 Originating Point Code (OPC) means a code assigned to identify a network node that originates SS7 messages.

13.4.1.9 Query means an SS7 TCAP message sent to a database requesting information.

13.4.1.10 Response means an SS7 TCAP message reply to a query.

13.4.1.11 Special Billing Number means line records in LIDB that are based on an NPA-RAO numbering format. NPA-RAO numbering formats are similar to NPA-NXX formats except that the fourth digit of an NPA-RAO line record is either a zero (0) or a one (1).

13.4.1.12 Toll Billing Exception (TBE) Service means a service that allows end users to restrict third number billing or collect calls to their lines.

13.4.1.13 Validation Information means Data Owners' records of all their Calling Card Service and Toll Billing Exception Service.

13.4.2 LIDB Validation

13.4.2.1 SWBT will provide MCIm access to Validation Information whenever MCIm initiates a query from an SSP for Validation Information available in SWBT's LIDB.

13.4.2.2 All MCIm queries to SWBT's LIDB will use a subsystem number to be provided by MCIm to SWBT in the calling party address field and a translations type of 253. MCIm acknowledges that such subsystem number and translation type values are necessary for SWBT to properly process Validation queries to its LIDB.

13.4.2.3 SWBT may employ certain automatic and/or manual overload controls to protect SWBT's CCS/SS7 network. SWBT will report to MCIm any instances where overload controls are invoked due to MCIm's CCS/SS7 network and MCIm agrees in such cases to take corrective action to the same extent SWBT prescribes for itself. Any network management controls found necessary to protect LIDB Validation from an overload condition will be applied based on non-discriminatory guidelines and procedures. Such management controls will be applied to the specific problem source to the extent technically feasible.

13.4.2.4 SWBT's LIDB will contain a record for every SWBT working line number and Special Billing Number served by

SWBT. Other telecommunications companies, including MCIm, may also store their data in SWBT's LIDB. SWBT will request such telecommunications companies to also provide a record for every working line number and Special Billing Number served by each of those companies.

13.4.2.5 SWBT's LIDB Validation Service will provide the following functions on a per query basis: validation of a telecommunications calling card account number stored in LIDB; determination of whether the subscriber of the billed line has decided in advance to reject certain calls billed as collect or to a third number; and determination of billed line as a public (including those classified as semi public) or nonworking telephone number.

13.4.2.6 SWBT provides LIDB Validation Service as set forth in this Attachment only as such service is used for MCIm's LSP activities on behalf of its Missouri local service customers where SWBT is the incumbent local exchange carrier. MCIm agrees that any other use of SWBT's LIDB for the provision of LIDB Validation Service by MCIm outside of the area where SWBT is the incumbent local exchange carrier in Missouri will be pursuant to the applicable SWBT tariff, as revised, for LIDB Validation Service.

13.4.2.6.1 SWBT cannot distinguish between queries from MCIm's Operator Service Systems as an LSP within the SWBT traditional serving area in Missouri from other uses of MCIm's Operator Service Systems. If for any reason the rates for LSP query and/or query transport and the rates for non-LSP query and/or query transport rate diverge prior to the development of any technically feasible method to distinguish LSP queries from other queries, MCIm will develop an allocation factor to distinguish the proportion of queries attributed to MCIm as an LSP within the SWBT serving area from other queries. Should MCIm choose to treat all queries at the higher rate, MCIm will not be required to develop an allocation factor.

13.4.2.6.2 SWBT will notify MCIm of any divergence of rates at least thirty (30) days in advance of the divergence. Within twenty (20) days after receipt of notice, MCIm will

advise SWBT whether MCIm elects to pay the higher rate or elects to develop an allocation factor. MCIm will provide its factor and SWBT will accept and apply the factor as soon as technically feasible but in no event later than ninety (90) days after MCIm notifies SWBT of its intent to develop a factor. Until MCIm develops and provides its factor, SWBT shall treat all queries at the higher rate, except that a true-up will occur for the period of time required for implementation of the allocation factor, but in no event to exceed ninety (90) days. The factor may be changed by MCIm on a quarterly basis and be subject to audit by SWBT on a yearly basis.

13.4.2.7 LIDB Validation provided by SWBT to MCIm will meet applicable performance standards and requirements and be at least equal in quality and performance as that which SWBT provides to itself. LIDB Validation will be provided in accordance with SWBT Technical Publications or industry accepted technical publications, to the extent consistent with the Act. Such publications and documents will be shared with MCIm and SWBT will provide MCIm with the opportunity to comment on any and all proposed changes at least one hundred twenty (120) days prior to a proposed implementation date. MCIm may request and SWBT will provide, to the extent technically feasible, LIDB Validation that is superior or lesser in quality than SWBT provides to itself and such service will be requested pursuant to the BFR process.

13.4.3 Ownership of Validation Information

13.4.3.1 MCIm's access to any LIDB Validation Information does not create any ownership interest that does not already exist. Except that telecommunications companies, including MCIm, which are data owners and deposit information in SWBT's LIDB retain full and complete ownership and control over such information.

13.4.3.2 Unless expressly authorized in writing by Parties, LIDB Validation is not to be used for purposes other than validating ABS-related calls. **MCIm may use LIDB Validation for such functions on a call-by-call basis.**

13.4.3.3 Proprietary information residing in SWBT's LIDB is protected from unauthorized access. Except for information for which MCIm is the Data Owner, MCIm may not store LIDB information in any table or database for any reason. All information related to alternate billing service is proprietary. Examples of proprietary information are as follows:

-Billed (Line/Regional Accounting Office (RAO)) Number
-PIN Number(s)
-Billed Number Screening (BNS) indicators
-Class of Service (also referred to as Service or Equipment)
-Reports on LIDB usage
-Information related to billing for LIDB usage
-LIDB usage statistics.

13.4.3.4 MCIm agrees that it will not copy, store, maintain, or create any table or database of any kind that is based upon a response to a query to SWBT's LIDB, except for any responses related to information for which MCIm is the Data Owner.

13.4.3.5 If MCIm acts on behalf of other carriers to access SWBT's LIDB Validation, MCIm will contractually prohibit such carriers from copying, storing, maintaining, or creating any table or database of any kind from any response provided by SWBT after a Validation query to SWBT's LIDB, except for any information for which such person is the Data Owner.

13.4.3.6 SWBT will share end user information, pertinent to fraud investigation, with MCIm when validation queries for the specific end user reaches SWBT's established fraud threshold level. This fraud threshold level will be applied uniformly to all end user information in SWBT's LIDB **unless MCIm requests otherwise and such request is technically feasible.**

13.4.3.7 Nothing in Sections 13.4.3.1 through 13.4.3.7 is intended to restrict MCIm's use or storage of MCIm data created or acquired independently of SWBT's LIDB Validation.

13.4.4 LIDB Storage and Administration

13.4.4.1 Definitions:

13.4.4.1.1 Data Base Administration Center (DBAC) means a SWBT location where facility and administrative personnel are located for administering LIDB and/or Sleuth.

13.4.4.1.2 Group means, for the purpose of this Attachment, a specific NPA-NXX and/or NPA-RAO combination.

13.4.4.1.3 Group Record means information in LIDB or LVAS that is common to all lines or billing records in an NPA-NXX or NPA-RAO.

13.4.4.1.4 LIDB Editor means a database editor located at the SCP where LIDB resides. LIDB Editor provides emergency access to LIDB that bypasses the service management system for LIDB.

13.4.4.1.5 Line Validation Administration System (LVAS) means an off-line administrative system, used by SWBT to add, delete and change information in LIDB. For purposes of this Attachment, LVAS is SWBT's service management system for LIDB.

13.4.4.1.6 Line Record means information in LIDB or LVAS that is specific to a single telephone number or Special Billing Number.

13.4.4.1.7 Toll Billing Exception (TBE) means a LIDB option that allows end users to restrict third number billing or collect calls to their lines.

13.4.4.1.8 Service Management System (SMS) means an off-line system used to access, create, modify, or update information in LIDB. For the purposes of this Attachment, the SMS for LIDB is LVAS.

13.4.4.1.9 Sleuth means an off-line administration system that SWBT uses to monitor suspected occurrences of ABS-related fraud. Sleuth uses a systematic pattern analysis of query message data to identify potential incidences of fraud that may require investigation. Detection parameters are

based upon vendor recommendations and SWBT's analysis of collected data and are subject to change from time to time.

13.4.4.1.10 Special Billing Number (SBN) Account Groups means line records in LIDB that are based on an NPA-RAO numbering format. NPA-RAO numbering formats are similar to NPA-NXX formats except that the fourth digit of an NPA-RAO line record is either a zero (0) or a one (1).

13.4.4.1.11 Tape Load Facility means a separate data entry point at the SCP where LIDB resides. The tape load facility provides direct access to LIDB for data administration and bypasses the service management system of SWBT's LIDB.

13.4.4.1.12 Translation Type means a code in the Signaling Connection Control Point (SCCP) of the SS7 signaling message. Translation Types are used for routing LIDB queries. Signal Transfer Points (STPs) use Translation Types to identify the routing table used to route a LIDB query. Currently, all LIDB queries against the same exchange and Translation Type are routed to the same LIDB.

13.4.4.2 General Description and Terms

13.4.4.2.1 SWBT's LIDB is connected directly to a service management system (i.e., LVAS), a database editor (i.e., LIDB Editor), and a tape load facility. Each of these facilities, processes, or systems, provide SWBT with the capability of creating, modifying, changing, or deleting, line/billing records in LIDB. SWBT's LIDB is also connected directly to an adjunct fraud monitoring system (i.e., Sleuth).

13.4.4.2.2 From time-to-time, SWBT enhances its LIDB to create new services and/or LIDB functionalities. Such enhancements may involve the creation of new line-level or group-level data elements in LIDB. SWBT will coordinate with MCIm to provide MCIm with the opportunity to